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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,922	04/26/2007	Kimihiro Nomura	MFA-106US	2933
52473	7590	02/05/2009		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,922	Applicant(s) NOMURA ET AL.	
	Examiner Peter D. Nolan	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/9/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/9/2006 has been received and placed of record in the file.

Claim Objections

2. Claim 7 is objected to. The term "other vehicles" is unclear as to whether it refers to vehicles containing similar navigation apparatuses as contained in the own vehicle or all vehicles, containing apparatuses or not, existing between own vehicle and target vehicle. The rejection of claim 7 below is based on "other vehicles" being all vehicles.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Melen (US 2004/0148090 A1).

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3. **Regarding claim 1**, Melen teaches a navigation apparatus (**see Melen figure 3A, Navigation System 300a and paragraph 7**) comprising: an input unit that inputs an other vehicle search condition (**see Melen figure 3A, input 304 and paragraph 31 where the group of members may be established in the navigation systems by manual input**); a current position acquisition unit that acquires current position information of own vehicle (**see Melen figure 3A, GPS module 302**); a reception unit that receives vehicle feature information and current position information of the other vehicle transmitted from the other vehicle (**see Melen figure 3A, Wireless Communications Module 316 and paragraph 53 where information regarding members of the group, such as identification and position, may be communicated to/from the members**); a control unit that performs other vehicle determination as to whether a search target other vehicle exists or not based on the other vehicle search condition set in the input unit, the current position information of the own vehicle acquired in the current position acquisition unit, and the current position information of the other vehicle received in the reception unit (**see above regarding setting an other vehicle search condition. See also Melen figure 3a, processor 306 and paragraph 54 where the processor 306 controls the operation of the navigation system such as establishing a group, operating the display, and requesting communications from the group. See also figure 4 and paragraph 57 where a map indicating a display of the locations of the group members may be displayed. Although not explicitly disclosed in Melen, it is well known in the art that navigation systems have variable scales. Therefore if a group member is not within the display scale,**

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i.e. is outside of the display scale of map, it would not be shown and therefore not exist); and a display unit that displays the vehicle feature information of the other vehicle when it is determined that the search target other vehicle exists in the other vehicle determination (**see above regarding the display of the group**).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melen (US 2004/0148090 A1) in view of Emigh, et al. (US 7330112 B1).

3. **Regarding claim 2**, Melen does not teach where the other vehicle search condition is the other vehicle existing within a predetermined distance range from the current position of the own vehicle.

4. Emigh teaches a vehicle navigation system (**see Emigh figure 1, location sensing hardware 101 and column 2, lines 33-44 and column 2, lines 62-67**) capable of inputting a search condition for another vehicle based on the other vehicle existing within a predetermined distance range from the current position of the vehicle (**see Emigh column 6, lines 18-26**).

5. It would be obvious to one skilled in the art for the other vehicle search condition in Melen to be based on the other vehicle existing within a predetermined distance range from the current position of the own vehicle, as taught in Melen, because it would

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be faster to rendezvous with closer vehicles than more distant vehicles when vehicles are traveling as a group.

6. Claims 3, 6, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melen (US 2004/0148090 A1) in view of Tomoki, et al. (JP2000285381 Abstract only).

7. **Regarding claim 3**, Melen teaches a navigation apparatus (**see Melen figure 3A, Navigation System 300a and paragraph 7**) comprising: a route search unit that searches for a route to a destination (**see Melen paragraph 2**); a current position acquisition unit that acquires current position information of own vehicle (**see Melen figure 3A, GPS module 302**); a reception unit that receives vehicle feature information, current position information vehicle transmitted from the other vehicle (**see Melen figure 3A, Wireless Communications Module 316 and paragraph 53 where information regarding members of the group, such as identification and position, may be communicated to/from the members**); a control unit that performs other vehicle determination as to whether other vehicle exists or not based on the current position information of the own vehicle acquired in the current position acquisition unit, and the current position information of the other vehicle received in the reception unit (**see above regarding setting an other vehicle search condition. See also Melen figure 3a, processor 306 and paragraph 54 where the processor 306 controls the operation of the navigation system such as establishing a group, operating the display, and requesting communications from the group. See also figure 4 and paragraph 57 where a map indicating a display of the locations of the group members may be displayed. Although not explicitly disclosed in Melen, it is well**

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known in the art that navigation systems have variable scales. Therefore if a group member is not within the display scale, it would not be shown and therefore not exist); and a display unit that displays the vehicle feature information of the other vehicle when it is determined that the other vehicle exists in the other vehicle determination (**see above regarding the display of the group**).

8. However, Melen does not teach where the control unit performs other vehicle determination as to whether other vehicle running on the same route as the own vehicle exists or not based on the search route information of the own vehicle searched in the route search unit, the current position information of the own vehicle acquired in the current position acquisition unit, and the search route information and the current position information of the other vehicle received in the reception unit; and the display unit displays the vehicle feature information of the other vehicle when it is determined that the other vehicle running on the same route as the own vehicle exists in the other vehicle determination.

9. Tomoki teaches where a navigation system performs other vehicle determination as to whether the other vehicle running on the same route as the own vehicle exists or not based on the search route information of the own vehicle searched in the route search unit and the search route information of the other vehicle (**see Tomoki abstract where a vehicle, A, transmits destination information which is received by a vehicle to be followed, B, which in turn transmits a guide agreement message if the destination is similar**) and displays the vehicle feature information of the other vehicle when it is determined that the other vehicle running on the same route as the

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own vehicle exists in the other vehicle determination (**see Tomoki abstract where if vehicle B exists, the vehicle features of vehicle B, such as car type, car body color, and license plate number, is displayed on a display device**).

10. It would be obvious to one skilled in the art to modify the navigation apparatus in Melen to perform the vehicle determination in Tomoki because it reduces the burden on the user to follow peripheral vehicles whose destinations are similar (**see Tomoki Abstract**).

11. **Regarding claim 6**, Melen, as modified by Tomoki in claim 3 teaches where when it is determined that the other vehicle running on the same route as the own vehicle exists in the other vehicle determination, the control unit determines whether the other vehicle has the same search route information as the own vehicle or not; and wherein when the control unit determines that the other vehicle has the same search route information, the control unit recognizes the other vehicle as a target vehicle (**see the rejection of claim 3 above regarding the identification of vehicle B based on the similar destinations of vehicles A and B. See also Tomoki, Abstract where vehicle B is to be followed, i.e. vehicle B is a target vehicle**).

12. **Regarding claim 8**, Melen does not teach where the vehicle feature information includes at least one of a vehicle color, a vehicle model, a vehicle size, a model year, and an exterior part.

13. Tomoki teaches where vehicle feature information includes a vehicle color (**see Tomoki Abstract where a vehicle to be followed is displayed on a map and distinguished by the vehicle color**).

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14. It would be obvious to one skilled in the art for the vehicle feature in Melen to include vehicle color because it would enable a member of the group in Melen to more easily locate other members of the group.

15. **Regarding claim 9**, Melen, as modified by Tomoki in claim 3 teaches where the vehicle feature information includes at least one of a vehicle color, a vehicle model, a vehicle size, a model year, and an exterior part (**see the rejection of claim 3 above**).

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melen (US 2004/0148090 A1) in view of Tomoki, et al.(JP2000285381 Abstract only) and further in view of Emigh, et al. (US 7330112 B1).

17. **Regarding claim 4**, Melen, as modified by Tomoki in claim 3, does not teach where the control unit searches for the other vehicle existing within a predetermined distance range from the current position of the own vehicle in the other vehicle determination.

18. Emigh teaches a vehicle navigation system (**see Emigh figure 1, location sensing hardware 101 and column 2, lines 33-44 and column 2, lines 62-67**) capable of inputting a search condition for another vehicle based on the other vehicle existing within a predetermined distance range from the current position of the vehicle (**see Emigh column 6, lines 18-26**).

19. It would be obvious to one skilled in the art for the other vehicle search condition in Melen to be based on the other vehicle existing within a predetermined distance range from the current position of the own vehicle, as taught in Melen, because it would

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be faster to rendezvous with closer vehicles than more distant vehicles when vehicles are traveling as a group.

20. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melen (US 2004/0148090 A1) in view of Tomoki, et al. (JP2000285381 Abstract only) and further in view of Morita (US 2002/0152019 A1).

21. **Regarding claim 5**, Melen, as modified by Tomoki in claim 3, does not teach where when it is determined that the other vehicle running on the same route as the own vehicle exists in the other vehicle determination, the control unit calculates the distance between the other vehicle and the own vehicle and displays the distance on the display unit.

22. Morita teaches a navigation system that calculates the distance between a vehicle and another vehicle containing a navigation system and displaying the distance on the display unit (**see Morita figure 3, relative position determining section 101 and display panel 6. See also paragraphs 33 and 34 where the distance from a vehicle to another vehicle is calculated and displayed on a display panel**).

23. It would be obvious to one skilled in the art for the system in Melen, as modified by Tomoki in claim 3, to calculate and display the distance between a user's vehicle and another vehicle, as taught in Morita, because it is important for a driver to know the relative bearing and distance with other vehicles (**see Morita paragraph 7**).

24. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melen (US 2004/0148090 A1) in view of Tomoki, et al. (JP2000285381 Abstract only) and further in view of Morita (US 2002/0152019 A1) and Watanabe, et al. (US 7047130 B2).

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25. **Regarding claim 7**, Melen, as modified by Tomoki in claim 3, does not teach where when the control unit determines that the other vehicle does not have the same search route information as the own vehicle, the control unit stores the distance to the other vehicle and calculates how many other vehicles exist between the own vehicle and the target vehicle for display.

26. Morita teaches a navigation system that stores the distance between a vehicle and another vehicle (**see Morita figure 3, relative position determining section 101 and display panel 6. See also paragraphs 33 and 34 where the distance from a vehicle to another vehicle is calculated and displayed on a display panel**).

27. Watanabe teaches a navigation system where the control unit calculates how many vehicles exist between a point and a user's vehicle (**see Watanabe figures 10-13; column 12, lines 31-41; and column 13, lines 23-28 and lines 43-50**).

28. It would be obvious to one skilled in the art for the system in Melen, as modified by Tomoki in claim 3, to store the distance between a user's vehicle and another vehicle, as taught in Morita, because it is important for a driver to know the relative bearing and distance with other vehicles (**see Morita paragraph 7**).

29. It would further be obvious to one skilled in for the system in Melen, as modified by Tomoki in claim 3, to calculate and display the number of vehicles between a point and the user's vehicle, as taught in Watanabe, because it provides the user an indication of a traffic jam status (**see Watanabe column 13, lines 43-50**). If the target vehicle determined by Melen, as modified by Tomoki in claim 3, is already at the

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destination, then the combined Melen/Tomoki/Watanabe system will calculate the number of vehicles between the user's vehicle and the target vehicle.

Conclusion

Any inquiry concerning this or any earlier communication from the examiner should be directed to Examiner Peter Nolan, whose telephone number is 571-270-7016. The examiner can normally be reached Monday-Friday from 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached at 571-272-6956. The fax number for the organization to which this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peter D Nolan/

Examiner, Art Unit 3661

1/28/2009

/Thomas G. Black/

Supervisory Patent Examiner, Art Unit 3661